

## CLAIMS

I claim:

1. A method of interpreting crash sensor data, comprising:  
changing an acceleration influence of a rollover algorithm when at least one selected sensor velocity exceeds a chosen threshold.
2. The method of claim 1, including determining whether the sensor velocity exceeds the chosen threshold by determining a difference between the sensor velocity and the threshold and comparing the difference to the threshold.
3. The method of claim 2, including subtracting the difference from the acceleration influence when the difference exceeds the threshold.
4. The method of claim 1, including determining a difference between a front sensor velocity and the threshold and subtracting the difference from the acceleration influence when the difference exceeds the threshold.
5. The method of claim 1, including determining a side impact condition by determining a difference between the sensor velocities of at least two sensors that are positioned on laterally opposite sides of a vehicle.

6. The method of claim 5, including determining if the difference is greater than the threshold and subtracting the difference from the acceleration influence when the difference is greater than the threshold.
7. The method of claim 1, including determining a first difference between a first side sensor velocity and the threshold, determining a second difference between a second, laterally oppositely positioned sensor velocity and the threshold and determining a side velocity value from the difference between the first difference and the second difference.
8. The method of claim 7, including subtracting the side velocity value from the acceleration influence when the side velocity value exceeds the threshold.

9. A system for determining a type of vehicle crash event, comprising:
  - at least one crash sensor that provides an indication of a sensor velocity; and
  - a controller that receives the sensor velocity indication and changes an acceleration influence of a rollover algorithm used by the controller when the sensor velocity exceeds a chosen threshold.
10. The system of claim 9, wherein the crash sensor comprises a front sensor that provides an indication of a velocity of a front portion of the vehicle and the controller determines a difference between the front sensor velocity and the threshold and subtracts the difference from the acceleration influence when the difference exceeds the threshold.
11. The system of claim 9, wherein the controller determines whether the sensor velocity exceeds the chosen threshold by determining a difference between the sensor velocity and the threshold and comparing the difference to the threshold.
12. The system of claim 11, wherein the controller subtracts the difference from the acceleration influence when the difference exceeds the threshold.

13. The system of claim 9, including at least one first side crash sensor that provides an indication of a side velocity of a first side of the vehicle, at least one second side crash sensor that provides an indication of a side velocity of a second side of the vehicle and wherein the controller determines a side impact condition based upon a determined difference between the first and second side sensor velocities.
14. The system of claim 13, wherein the controller determines if the difference is greater than the threshold and subtracts the difference from the acceleration influence when the difference is greater than the threshold.
15. The system of claim 9, including at least one first side crash sensor that provides an indication of a side velocity of a first side of the vehicle, at least one second side crash sensor that provides an indication of a side velocity of a second side of the vehicle and wherein the controller determines a first difference between the first side sensor velocity and the threshold, a second difference between the second side sensor velocity and the threshold and determines a side velocity value from a difference between the first difference and the second difference.
16. The system of claim 15, wherein the controller subtracts the side velocity value from the acceleration influence when the side velocity value exceeds the threshold.